C.D. Howe Institute
Institut C.D. Howe

Backgrounder

June 14, 2001

Canada's Inflation Targets:
Clearer, But Not Yet Clear

Shay Aba

Inflation targeting has been the main focus of Canadian monetary policy since 1991 and, with the Bank of Canada's recent renewal of a 2 percent inflation target, will continue to be at least until the end of 2006. The Bank has made a few changes in the way it will implement the targeting regime. These changes improve the regime, but difficulties still arise from the use of core inflation as an operational target. The solution, for the next five years, is to continue emphasizing that total inflation as measured by the consumer price index, rather than core inflation, is the ultimate target. Next time the targets are up for renewal, however, the Bank should consider dropping core inflation as an operational target and focus instead on a multiyear average inflation rate.

The Bank of Canada's recent announcement that it is renewing its 2 percent inflation target is a welcome event. Over the past decade, inflation targets have helped cement progress from the high and variable inflation of the 1970s and 1980s to low and stable inflation since 1991, and the renewal announcement marks another step forward in Canada's pioneering efforts in this area.

The target continues to be a 12 month increase in the consumer price index (CPI) of 2 percent, with a band of 1 percentage point on either side. This time, however, the target has been set for five years, rather than the three-year span used in previous renewals. Moreover, the Bank has adopted a new definition of "core" inflation — essentially the CPI, excluding volatile food and energy components — that is superior to the old one, and it has committed itself to reporting regularly its success or failure in hitting the target.

Even after a decade of experience, however, inflation targeting in Canada still presents challenges. The renewal announcement came only hours after Statistics Canada's release of the CPI number for April, which was up 3.6 percent from a year earlier. Despite an inflation rate outside the top of the target band, the Bank of Canada's next interest rate adjustment, on May 29, was a 25 basis point reduction, on the grounds

103-00935/

that "core inflation…is expected to fall from above 2 per cent currently to just below 2 per cent by the end of 2001" (Bank of Canada 2001b). These events both help to explain why many commentators believe the Bank does not, in fact, target the total CPI and point to some credibility and accountability problems with the current regime.

There are ways of addressing these problems, in both the longer term and the shorter term. Looking further out, when the next inflation targets are set in five years' time, the federal government and the Bank of Canada should consider an alternative way of framing the inflation target: a multiyear average for the CPI that would accommodate the temporary fluctuations in food and energy prices that occasionally affect the index, but without the confusion created by the Bank's use of an alternative "core" CPI in setting monetary conditions. In the near term, it will be important for the Bank to highlight at every opportunity the fact that its target is for total inflation, so that Canadians understand that the Bank takes all erosions in the purchasing power of their money equally seriously, regardless of which CPI subindex happens to be up the most over the previous year.

In the near term, it will be important for the Bank of Canada to highlight at every opportunity the fact that its target is for total inflation.

The New Regime

The new inflation targeting regime, like its predecessor, targets a year-over-year CPI inflation rate of 2 percent: the mid-point of a 1-to-3 percent band. Three changes, however, stand out when one compares the old inflation-targeting regime with the new one.

First, under the new regime, the targets have been renewed for a five-year period to the end of 2006, while previous renewals (in 1995 and 1998) adopted a three-year horizon.

Second, the Bank of Canada has replaced its old measure of core inflation, used as an operational target in judging short-term inflation trends, with a new measure that includes a larger share of the consumer basket (84 percent, rather than 74 percent under the old regime), predicts future changes in total CPI inflation with greater accuracy (see Hogan, Johnson, and Laflèche 2001), and is less volatile.

Finally, the Bank has committed itself to providing explicit explanations for deviations of total inflation from its 2 percent target in its *Monetary Policy Reports* and *Updates*, and to present the course of action it intends to take to bring inflation back on target when needed. The Bank will also indicate how long it expects the inflation rate to take to return to a level close to the 2 percent target, which will mean a sharper focus on achieving the 2 percent target rather than on being within the 1-to-3 percent band.

The New Target Should Reduce Inflation Uncertainty

Extending the targeting period to five years and placing greater emphasis on achieving the 2 percent target, rather than on just being within the 1-to-3 percent band, are important changes that should further reduce inflation uncertainty — resulting in, for example, cost savings in the writing of economic contracts such as wage settlements and loans. The development of such contracts involves costs that include lawyers' fees, time wasted, and possible strikes and lockouts. Inflation uncertainty is an important determinant of the duration of such contracts — and, therefore, of the frequency of writing them. Thus, the easier it is to predict future inflation, the easier it is to agree on

the inflation premiums that are to be specified in the contract. Lower long-term inflation uncertainty will mean longer-term contracts and cost savings for society.

Such savings were observed in Canada during the recent period of low inflation.[1] But reducing inflation uncertainty further could produce still more savings. Even if prevailing inflation targets are expected to continue beyond the end date of a contract, uncertainty about the rate to be targeted next can still cloud long-term decisionmaking, so the new five-year horizon should encourage longer-term contracts by reducing such uncertainty.

Focusing more clearly on the mid-point of the 1-to-3 percent band should make it easier for Canadians to anticipate the general level of prices well into the future.

As for the sharper focus on a 2 percent target, a key feature of annual inflation targets is that bygones are bygones — that is, being above (or below) the target today does not entail targeting a lower (or higher) inflation rate in the future. Given a 1 percent band on either side of the target, this sweeping aside of old mistakes means that, over long periods, the price level can drift well away from the path it would have followed with exact 2 percent annual increases. Focusing more clearly on the mid-point of the 1-to-3 percent band should mitigate the extent to which the Bank of Canada allows the price level to drift, and make it easier for Canadians to anticipate the general level of prices well into the future.

A New Measure of Core Inflation

The Bank of Canada's adoption of a new measure of core inflation is a key change. The old measure excluded all food and energy items, as well as the effect of changes in indirect taxes. The new measure, known as "CPIX," excludes only fruits, vegetables, gasoline, fuel oil, natural gas, intercity transportation, tobacco, mortgage interest, and the effects of changes in indirect taxes.

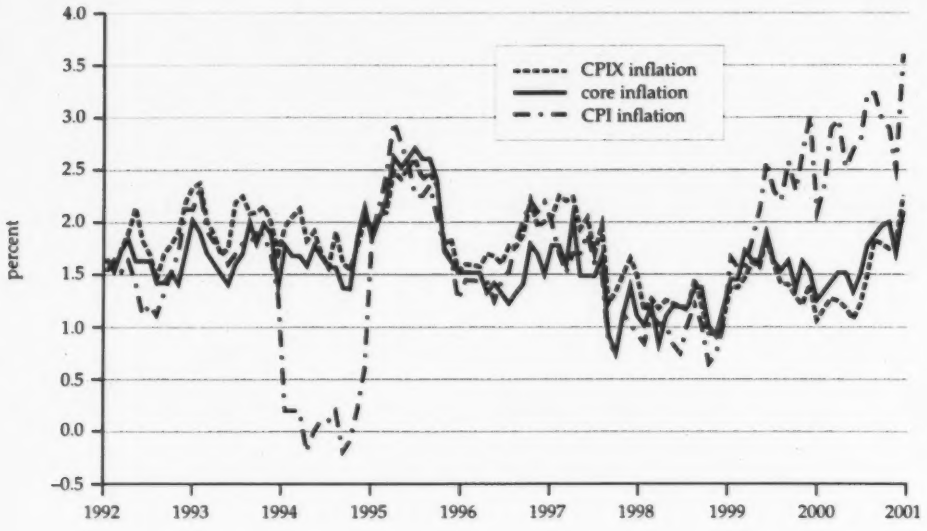
The new measure is expected to do a better job of predicting future total inflation than did either the old measure or total inflation itself. Core inflation measures can predict future total inflation better than total inflation since they exclude items whose impact on total inflation is usually believed to be temporary. But when the impact of excluded items is not temporary, core inflation and total inflation significantly diverge, and core inflation's ability to predict future total inflation declines, providing misleading signals to policymakers, as seems to have been Canada's recent experience.

As Figure 1 demonstrates, two episodes stand out in which core and total inflation significantly diverged. The first occurred in 1994, when a cut in tobacco excise taxes intended to reduce crossborder smuggling pushed the inflation rate below the bottom of the target band. Such one-time changes in indirect taxes typically will have an impact on measured inflation for about a year. This is a matter of arithmetic, not economics, and in this instance core inflation did indeed provide a better signal to policymakers seeking to control the underlying trend of inflation.

The more recent divergence, however, was caused by higher energy prices, and presents a different problem. From June 1999 to April 2001, total inflation exceeded the

1 For example, in 1978 the average duration of wage settlements contracts was only 18.9 months, while in 2000 it was 35.3 months. Person-days lost to strikes and lockouts fell from an average of 8,210,000 during the 1975–79 period to an average of 2,692,000 during the 1995–99 period. (See Canada 2001; Statistics Canada, CANSIM database). Declining unionization may also have contributed to the reduction.

Figure 1: ***Headline, Core, and CPIX Inflation, 1992–2001***



Sources: Bank of Canada; Statistics Canada.

old core inflation measure by an average of 1 percentage point. In both October and December 2000, total inflation was 3.2 percent — above the top of the target band for the first time since targeting began. In the first quarter of 2001, inflation averaged 2.8 percent, but energy rebates in Alberta and British Columbia played a key role in bringing the rate down; without them, it is estimated that inflation would have been 3.1 percent.[2] The second quarter of 2001 started with an even larger deviation from target, as total inflation was 3.6 percent. Most commentators, and the Bank of Canada itself, seemed untroubled by these numbers, noting that core inflation is well within the target band.

High energy prices reflect the fact that aggregate demand has been outrunning aggregate supply, both in the world generally and in Canada particularly.

But this complacency is misguided. High energy prices reflect the fact that aggregate demand has been outrunning aggregate supply, both in the world generally and in Canada particularly. Recent increases in food prices reflect the same type of problem. The fact that these bottlenecks have occurred first in markets for energy and food products rather than in markets for, say, housing and medical services does not mean that monetary policy should not react. Too much money, to borrow an old phrase, is chasing too few goods and services — indeed, one indicator that did predict the recent rise in inflation was money growth (see Robson and Aba 2000).

Complacency is also misguided when it comes to the public's reaction to higher prices. It is total inflation, not a subindex of the CPI, that affects the purchasing power of the money Canadians hold in their wallets and bank accounts. If the public learns that the Bank will allow the total rate to exceed the target, the next time a shock causes total inflation to climb significantly above core inflation, its effects will likely spill over

2 The Bank of Canada estimates that these rebates reduced year-over-year total inflation by 0.3 percent during the first quarter of 2001 (Bank of Canada 2001a).

faster into other prices and wages.[3] If the Bank waits until then to react, returning to an inflation rate within the target band will prove more costly.[4]

This risk is partially mitigated by the Bank's adoption of the CPIX index, but there is only a small probability that the new index would have yielded different interest-rate decisions over the past few years. In other words, the recent divergence of total and core inflation and the above-target total inflation rates would have occurred even if CPIX had been the official operating target.

Credibility and Accountability

A final, though related, concern about the inflation-targeting regime the Bank of Canada has used until now is that several of its elements gave grounds for doubting that the Bank's commitment to low inflation was as durable as it looked. I have already alluded to one problem: the fact that it was possible for actual inflation to deviate from the target while the Bank maintained — on the basis of its core inflation measure — that all was well. This state of affairs is hardly helpful to the credibility of the targets. The second problem was that such divergences highlighted the absence of any mechanisms by which the Bank could be called to account for its performance in hitting the inflation target.

The new inflation-targeting regime is a small step forward in remedying credibility and accountability problems.

The new inflation-targeting regime is a small step forward in remedying these problems. The Bank has now committed itself to explaining deviations of inflation from the target midpoint, and to describing what it is doing to get back on target and when that effort is expected to succeed. So explanations for missed targets, and the embarrassment of having to issue them, will provide some additional credibility and sense of accountability for the targeting regime.

Building credibility for a regime with two targets — the actual total CPI target and the operational core CPI target — is, however, bound to remain problematic. As long as the behavior of the operational target is the main influence on the Bank's interest rate setting, confusion is inevitable. The financial press will understandably focus on the core rate, with the result that many observers will conclude that the core rate is the one to which the 2 percent target applies.

In the near term, this confusion presents the Bank with a communications challenge. It must signal, as clearly and as frequently as possible, that its target is for total inflation only, and that it monitors core inflation only for information purposes. Its May 29 announcement of an interest rate change was discouraging in this respect. In this, its first policy action since the new inflation regime was announced, the Bank gave top billing to core inflation. In its next Bank Rate announcement in July and in its August *Monetary Policy Report*, the Bank should ensure that the main focus of its commentary is total inflation.

---

3 Energy prices are an example. The same scenario can occur when other items excluded from a core CPI measure are causing a persistent difference between core and "total" inflation.

4 Already there are signs that higher energy prices are causing a rise in long-term inflation expectations. The median long-term inflation forecast calculated from the Watson Wyatt Economic Expectations Survey (Watson Wyatt Canada 2001) is now 2.2 percent, compared with 2.1 percent in 2000, and 2 percent in 1999. The yield spread between conventional and real return bonds, a measure strongly influenced by inflation expectations, rose from an average of 2.06 percent over the first five months of 2000 to 2.36 percent over the same period in 2001.

In the longer term, another possible solution is to eliminate the two-target problem by lengthening the averaging period for the inflation target so that short-term deviations arising from temporary price changes create fewer problems for the Bank's ability to hit the target. For example, the Bank could target an average rate of total CPI inflation equal to 2 percent over a five-year period. This would entail aiming for an inflation rate that is above the 2 percent target after years in which inflation was below target. And it could further reduce the possibility of drifting away from a 2 percent annual inflation path, thus further increasing long-term inflation uncertainty.

Conclusion

The Bank of Canada's renewed inflation targets present a small but important step forward in its inflation-targeting regime. The decision to renew the targets for a five-year period, rather than a three-year period, and the sharper focus on achieving a total inflation rate of 2 percent should make long-term economic planning easier and result in real gains to the Canadian economy. The new operational target has broader coverage than the previous core inflation measure, and thus provides less leeway for the Bank's two targets to deviate from each other in ways that undermine public confidence in the regime and, potentially, the Bank's own ability to respond in a timely way to shocks. And the new commitment to report regularly when inflation is off target should further strengthen the credibility of the regime by making the Bank more accountable for its performance.

In the meantime, however, the Bank needs to guard against the inevitable confusion that two key inflation indexes create. In the short term, it needs to emphasize whenever it can that the 2 percent target rate refers to total inflation, rather than to core inflation, and to ensure that its enthusiasm for the predictive power of the CPIX does not cause it to neglect other indicators of the trend of inflation, such as money growth, that often convey useful information. And in the longer term, it should consider replacing the current targets for annual changes in the CPI with a longer-average target that would accommodate volatility in certain prices while avoiding the confusion arising from two headline-making indexes.

The Bank of Canada and the federal government deserve praise for their latest improvements to the targets and encouragement to continue enhancing a macroeconomic policy that has created such a signal success.

Canada has been a pioneer in inflation targeting, and Canadians have benefited from the improved economic climate under the targeting regime. The Bank of Canada and the federal government deserve praise for their latest improvements to the targets and encouragement to continue enhancing a macroeconomic policy that has created such a signal success.

References

Bank of Canada. 1999. *Monetary Policy Report*. Ottawa. November.

———. 2001a. *Monetary Policy Report*. Ottawa. May.

———. 2001b. "Bank of Canada lowers key policy rate by ¼ per cent." Press release, available from Internet website: www.bankofcanada.ca.

Canada. 2001. Human Resources Development Canada. *Wage Settlements Bulletin*. February.

Hogan, Seamus, Marianne Johnson, and Thérèse Laflèche. 2001. "Core Inflation." Bank of Canada Technical Report 89. Ottawa.

Robson, William B.P., and Shay Aba. 2000. "Stop the Press! Rapid Money Growth May Bring Higher Inflation." *C.D. Howe Institute Commentary* 144. Toronto: C.D. Howe Institute. September.

Watson Wyatt Canada. 2001. *Economic Expectations 2001: 20th Annual Canadian Survey*. [n.p.].

Backgrounder© is an occasional publication of the C.D. Howe Institute. Its purpose is to comment briefly on policy issues of immediate concern to Canadians.

As with all C.D. Howe Institute publications, the views expressed here are those of the author and do not necessarily reflect the opinions of the Institute's members or Board of Directors.

Shay Aba, the author of this *Backgrounder*, is a Policy Analyst at the C.D. Howe Institute.

Copies of *Backgrounder* are available free of charge from the C.D. Howe Institute, 125 Adelaide Street East, Toronto, Ontario M5C 1L7; tel.: 416-865-1904; fax: 416-865-1866; e-mail: cdhowe@cdhowe.org; Internet: www.cdhowe.org.

Quotation with appropriate credit is permissible.